

REMARKS

Applicants acknowledge receipt of the Examiner's Office Action dated June 7, 2004. Claims 19-32 were pending at the time this Office Action was sent. Claims 19-32 stand rejected. More particularly, claim 19 and 25 stand rejected under 35 § 102 as being anticipated by U.S. Patent No. 6,449,732 issued to Rasmussen et al. ("Rasmussen") Claims 20 and 31 stand rejected under 35 U.S.C. § 103 as being unpatentable over Rasmussen in view of U.S. Patent No. 6,003,130 issued to Anderson ("Anderson"). Claims 21-24 and 32 stand rejected under 35 U.S.C. § 103 as being unpatentable over Rasmussen in view of Anderson as these references were applied to claims 20 and 31, and further in view of U.S. Patent No. 5,878,248 issued to Tehranian et al. ("Tehranian"). Lastly, claims 26 – 30 stand rejected under 35 U.S.C. § 103 as being unpatentable over Anderson in view of Rasmussen. In light of the foregoing amendments and following remarks, Applicants respectfully request the Examiner's reconsideration and reexamination of all pending claims.

Claim 19 rejected under 35 U.S.C. § 102 as being anticipated by Rasmussen. Independent claim 19 sets forth:

An apparatus comprising:
a first printed circuit board;
a processor mounted to the first printed circuit board,
wherein the processor comprises a development port;
a system bus formed on the first printed circuit board and
coupled to the processor;
a second bus formed on the first printed circuit board and
coupled to the development port.

In rejecting claim 19, the Office Action asserts that Rasmussen teaches a second bus formed on a first printed circuit board and coupled to the development port citing Figure 2 and column 4, line 53 through column 5, line 6 in support thereof. The cited section of Rasmussen clearly recites a

processor module with a development port. Applicants reserve the right to argue that the development port described within Rasmussen is different from the development port of the present invention. The cited section within Rasmussen does not indicate that the development port of the processor module is coupled to a bus formed on a printed circuit board. Column 4, lines 59-61 of Rasmussen states that each processor module contains two ports that can be used for interface with a development computer system or as a slave interface. Lines 59 – 61, however, do not state that either port is coupled to a bus which, in turn, is formed on a printed circuit board. It may be that the processor module ports in Rasmussen are used to interface with a developing computer system or as a slave interface *before* the processor module is mounted on a printed circuit board. Lines 61 – 64 of Rasmussen state that each processor module also contains one optional port for system executive development or LAN support. However, lines 61 – 64 do not state that an optional port is coupled to a bus formed on a printed circuit board. Again, it may be the case that the optional port of each processor module in Rasmussen is coupled to a system executive for development *before* the processor module is mounted on a printed circuit board. Lines 63 – 66 in Rasmussen indicate that the system executive for each processor module communicates with its companion input/output section for that processor via a shared memory interface. Again, nothing within lines 63 – 66 indicate that a development port of the processor module is coupled to a bus formed on a printed circuit board. Lines 63 – 66 may indicate that the system executive for each processor module communicates with its companion input/output section *before* the processor module is mounted on a printed circuit board. Line 66 of columns 4 through line 1 of column 5, indicates that each input/output section communicates with at least one input/output module via a bus. However, line 66 of column 4 to line 1 of column 5 does not indicate that development port of the processor module is coupled to a bus formed on a printed circuit board. Lastly, column 5, lines 1 – 6 indicate that processor

modules communicate with at least one communications module via bus, and the communication module provides TCP/IP networking connections to the development PC, and the communication module provides development and slight interface ports. Again, nothing would indicate in column 5, lines 1 – 6 that a development PC communicates with the processor module of Rasmussen via a bus which is mounted on a printed circuit board which in turn is coupled to a development port of the processor module which is also mounted on the printed circuit board.

Claim 19 is very specific in reciting that a second bus is formed on the first printed circuit board and is coupled to the development port of the processor. Column 4, line 53 to column 5, line 6 simply does not teach or fairly suggest this limitation alone or in combination with the remaining limitations of independent claim 19. Likewise, Figure 2 fails to teach or fairly suggest a second bus formed on the first printed circuit board and coupled to the development port of the processor. As such, independent claim 19 is patentably distinguishable over Rasmussen.

Claims 20 – 25 depend from independent claim 19. Insofar as independent claim 19 has been shown to be patentably distinguishable over Rasmussen, it follows that dependent claims 20 – 25 are likewise patentably distinguishable.

It is noted that claim 20 and claim 31 were rejected under 35 U.S.C. § 103 as being unpatentable over Rasmussen in view of Anderson. In rejecting claim 20, the Office Action admits that Rasmussen does not teach claim 20's limitation:

wherein the first data storage device stores boot-up code; and
wherein the boot-up code can be transmitted from the first storage
device.

Thereafter, the Office Action alleges that the limitations of claim 20 set forth above are found within Anderson. The Office Action then states it would have been obvious to a person having ordinary skill in the art at the time the invention was made to have modified Rasmussen by the teachings of Anderson because including “wherein the first data storage device stores boot-up code; and wherein the boot-up code can be transmitted from the first storage device,” as allegedly taught within Anderson would enable the system to transfer boot-up code between different memory devices, allegedly taught by Anderson.

Applicants submit that the Office Action has failed to set forth a *prima facie* case of obviousness in rejecting claim 20. To establish a *prima facie* case of obviousness, three basic criteria must be met. First, there must be some suggestion or motivation, either in the references themselves or in the knowledge generally available to one of ordinary skill in the art, to modify the reference or to combine reference teachings. Second, there must be a reasonable expectation of success. Finally, the prior art reference (or references when combined) must teach or suggest all the claim limitations. The teaching or suggestion to make the claimed combination and the reasonable expectation of success must both be found in the prior art and not based on Applicants disclosure. The initial burden is on the Examiner to provide some suggestion of the desirability of doing what the inventor has done. To support the conclusion that the claimed invention is directed to obvious subject matter, either the references must expressly or impliedly suggest the claimed invention or the Examiner must be present a convincing line of reasoning as to why the artisan would have found the claimed invention to be obvious in light of the teachings of the references.

The Office Action alleges that column 3, lines 13-22 provides the motivation or suggestion to combine Rasmussen with Anderson. Column 3, in lines 13 – 22 recites:

The hardware data is then compared to the BIOS identifying data and, in the event that the hardware data and the BIOS identifying data do not correspond to the same CPU or other chip set components another BIOS program (if more than one is stored in the computer system) is selected or crisis recovery routine procedure is performed. In accordance with the crisis recovery procedure, a user inserts a disk containing the correct BIOS program into a disk drive so that the correct BIOS Program can be transferred to programmable memory in the computer system.

Column 3, lines 13 – 22 does not provide a motivation to combine Anderson with Rasmussen to “enable the system to transfer boot-up code between different memory devices” as asserted in the office action. Column 3, lines 13-22 of Anderson does not express or impliedly suggest the combination asserted by the Office Action.

Independent claim 26 stands rejected under 35 U.S.C. § 103 as being unpatentable over Anderson in view of Rasmussen. The Office Action alleges that Anderson teaches all the limitations of independent claim 26, but that Anderson does not teach “wherein the microprocessor comprises a development port.” The Office Action then alleges that Rasmussen teaches a method and apparatus for processing control in which he teaches a microprocessor comprising a development port. Thereafter the Office Action alleges it would have been obvious to a person having ordinary skill in the art at the time the invention was made to have modified Anderson by the teaching of Rasmussen, because including the microprocessor with the development port allegedly taught by Rasmussen would enable the system to be used for interface with the development computer system or as a slave interface, where each processor module also contains an optional port for system executive development, or LAN support as taught by Rasmussen citing column 4, lines 59 - 63 in support thereof. In rejecting claim 26, the Office Action alleges that Figure 2 of Anderson shows a microprocessor coupled to a system

bus and a second bus. Presumably, the Office Action points to the CPU 12 in Figure 2 of Anderson as being equal to the claimed processor. If this presumption is accurate, Anderson does not teach a method of booting up a system where the system comprises a microprocessor coupled to a system bus and a second bus since CPU 12 is coupled to only one bus (i.e., CPU bus 16). Accordingly, Applicants submit that independent claim 26 is patentably distinguishable over Anderson in view of Rasmussen.

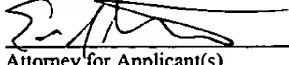
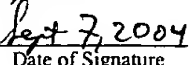
However, if it is presumed that CPU bus 16 in Figure 2 equates to the second bus set forth in independent claim 26, clearly nothing within Anderson teaches that the second bus (e.g., the CPU bus 16) is coupled to a development port of CPU 12. For this missing limitation, the Office Action looks to Rasmussen. Applicants submit, however, that the Office Action fails to establish a *prima facie* case of obviousness of independent claim 26. More particularly, it appears Anderson describes transmission of the first boot-up code via the CPU bus 16 to processor 12. Given that Anderson provides boot-up code to the CPU 12, there would appear to be no reason to provide boot-up code to CPU 12 via an optional bus (i.e., second bus coupled to a development port of a processor). Further, if CPU 12 in Anderson included a development port to enable interface with a development computer system, it is possible that the development port is coupled to the development computer system *before* CPU 12 is mounted on a printer circuit board. Lastly, nothing within the cited section of Rasmussen (e.g., column 4, lines 59-63) suggest a combination of Anderson and Rasmussen. Accordingly, Applicants submit that independent claim 26 is patentably distinguishable over the references cited.

Claims 27 – 30 depend from independent claim 26. Insofar as independent claim 26 has been shown to be patentably distinguishable, it follows that claims 27 – 30 are likewise patentably distinguishable.

Independent claim 31 stands rejected under 35 U.S.C. § 103 as being unpatentable over Rasmussen in view of Anderson. More particularly, the Office Action alleges that Rasmussen teaches a first print circuit board coupled to a second printed circuit board citing Figure 69 in support thereof. Applicants cannot find a Figure 69 within Rasmussen. The Office Action also cites column 4, lines 15 – 21 and column 17, lines 31 – 38 in support of the rejection. The Office Action asserts that Rasmussen discloses a second bus coupled to the development port, wherein the second bus is formed on the first printed circuit board, citing Figure 2 and column 4, line 53 – column 5, line 6 in support thereof. As noted above with respect to independent claim 20, the cited sections of Rasmussen do not teach or fairly suggest a second bus coupled to the development port, wherein the second bus is formed on the first printed circuit board. Moreover, as noted above, the Office Action fails to provide a *prima facie* case of combining Rasmussen and Anderson as set forth above. Accordingly, Applicants submit that dependent claim 31 is patentably distinguishable over the references cited.

CONCLUSION

Applicant(s) submit that all claims are now in condition for allowance, and an early notice to that effect is earnestly solicited. Nonetheless, should any issues remain that might be subject to resolution through a telephonic interview, the Examiner is requested to telephone the undersigned.

I hereby certify that this correspondence is being deposited with the United States Postal Service as First Class Mail in an envelope addressed to: Mail Stop Amendment, Commissioner for Patents, P.O. Box 1450, Alexandria, Virginia, 22313-1450, on <u>Sept 7, 2004</u> .	
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Respectfully submitted,



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